

Amendment to the Claims:

The claims under examination in this application, including their current status and changes made in this paper, are respectfully presented.

1 (currently amended). In a direct sequence spread spectrum (DSSS) communications receiver, a system for demodulating information channels in a plurality of sample streams, the system comprising:

a controller having an output to select a sample stream; and

a plurality of demodulating fingers, each demodulating finger having sample stream inputs to accept the plurality of sample streams, a selection input connected to the controller output to accept sample stream selection commands, and each demodulating finger demodulating information channels to provide soft symbols from the selected sample stream at a soft symbol output;

wherein each demodulating finger includes a multiplexer having a plurality of inputs connected to the demodulating finger sample stream inputs to accept the plurality of sample streams, a select input connected to the demodulating finger selection input to accept the sample stream selection commands, and an output to provide the selected sample stream.

Claim 2 is canceled.

2 ³ (currently amended). The system of claim 2 ¹ wherein each demodulating finger further includes:

a plurality of finger channels, wherein each finger channel includes a sample stream input coupled to the multiplexer output to accept the selected sample stream, a code input to accept an uncovering code, each finger channel demodulating an information channel in the selected sample stream in response to the accepted uncovering code to provide soft symbols at a soft symbol output connected to the demodulating finger soft symbol output.

3 ² ~~4~~ (original). The system of claim ² ~~3~~ further comprising:

a code generator having an output to provide uncovering codes; and

wherein each demodulating finger further includes a code input connected to the code generator output to accept uncovering codes; and

wherein the code input of each finger channel is connected to the demodulating finger code input to accept uncovering codes.

⁴ 5 (previously presented). The system of claim 1 in which the plurality of sample streams are converted from a plurality of accepted carriers; and

wherein each demodulating finger accepts the plurality of sample streams converted from the plurality of carriers.

⁴ 5 6 (original). The system of claim ⁴ 5 wherein the controller selects a sample stream for each of the demodulating fingers from the plurality of sample streams.

⁵ 6 7 (original). The system of claim ⁵ 6 in which three sample streams are respectively converted from a first, second, and third carrier;

wherein the controller assigns a first sample stream, from the first carrier, to a first demodulating finger from the plurality of demodulating fingers;

wherein the controller assigns a second sample stream, from the second carrier, to a second demodulating finger from the plurality of demodulating fingers; and

wherein the controller assigns a third sample stream, from the third carrier, to a third demodulating finger from the plurality of demodulating fingers.

⁵ 7 8 (original). The system of claim ⁵ 7 in which three sample streams are respectively converted from a first, second, and third carrier;

wherein the controller assigns a first sample stream, from the first carrier, to a first demodulating finger from the plurality of demodulating fingers; and

wherein the controller assigns the first sample stream, from the first carrier, to a second demodulating finger from the plurality of demodulating fingers.

⁷ 8 9 (previously presented). The system of claim ⁷ 8 wherein the controller assigns the first sample stream, from the first carrier, to a third demodulating finger from the plurality of demodulating fingers.

⁹10 (previously presented). The system of claim 1 in which a first carrier is received with at least a first and second multipath delay, and in which the first carrier first and second multipath delays are converted into a first sample stream with at least a first and second delay;

wherein the controller assigns the first sample stream first delay to a first demodulating finger from the plurality of demodulating fingers; and

wherein the controller assigns the first sample stream second delay to a second demodulating finger from the plurality of demodulating fingers.

¹⁰11 (currently amended). In a direct sequence spread spectrum (DSSS) communications receiver, a demodulating finger for demodulating information channels in a plurality of sample streams, the demodulating finger comprising:

sample stream inputs to accept the plurality of sample streams;

a selection input to accept sample stream selection commands;

a multiplexer having a first input connected to the demodulating finger sample stream inputs to accept the plurality of sample streams, a second input connected to the demodulating finger selection input to accept the sample stream selection commands, and an output to provide the selected sample stream; and

a soft symbol output to provide soft symbols from demodulated information channels in a selected sample stream.

Claim 12 is canceled.

¹⁰13 (currently amended). The demodulating finger of claim ~~12~~ ¹⁰13 further comprising:

a plurality of finger channels, wherein each finger channel includes a sample stream input coupled to the multiplexer output to accept the selected sample stream, a code input to accept an uncovering code, each finger channel demodulating an information channel in the selected sample stream in response to the accepted uncovering code to provide soft symbols at a soft symbol output connected to the demodulating finger soft symbol output.

¹²
14 (original). The demodulating finger of claim ¹¹13 wherein each demodulating finger further includes:

a code input to accept a plurality of uncovering codes; and
wherein the code input of each finger channel is connected to the demodulating finger code input to accept an uncovering code.

¹⁰
¹³15 (original). The demodulating finger of claim 14 in which the plurality of sample streams correspond to a plurality of converted carriers; and

wherein the demodulating finger accepts the plurality of sample streams converted from the plurality of carriers.

¹³
¹⁴16 (previously presented). The demodulating finger of claim 15 in which a first, second, and third sample stream are respectively converted from a first, second, and third carrier;

wherein the demodulating finger accepts the sample stream selection commands for the selection of a sample stream from the group including first, second, and third sample streams.

17 (canceled).

^{canceled}
18 (previously presented). The method of claim 23 wherein accepting the plurality of sample streams includes each sample stream having an information channel; and

wherein providing soft symbols includes providing soft symbols from an uncovered information channel in the selected sample stream.

^{canceled}
19 (original). The method of claim 18 further comprising:

uncovering the information channel with a Walsh code.

^{canceled}
20 (original). The method of claim 19 further comprising:

preceding the uncovering of the information channel with the Walsh code accepting the Walsh code.

canceled
21 (original). The method of claim 18 wherein accepting the plurality of sample streams includes each sample stream having a plurality of information channels; and
wherein providing the soft symbols includes providing soft symbols from a plurality of demodulated information channels in the selected sample stream.

canceled
22 (~~previously presented~~). The method of claim 23 wherein selecting a sample stream includes selecting each sample stream from the plurality of sample streams; and
wherein providing soft symbols from the selected sample stream includes providing soft symbols from each of the plurality of sample streams.

Claims 23 through 29 are canceled.